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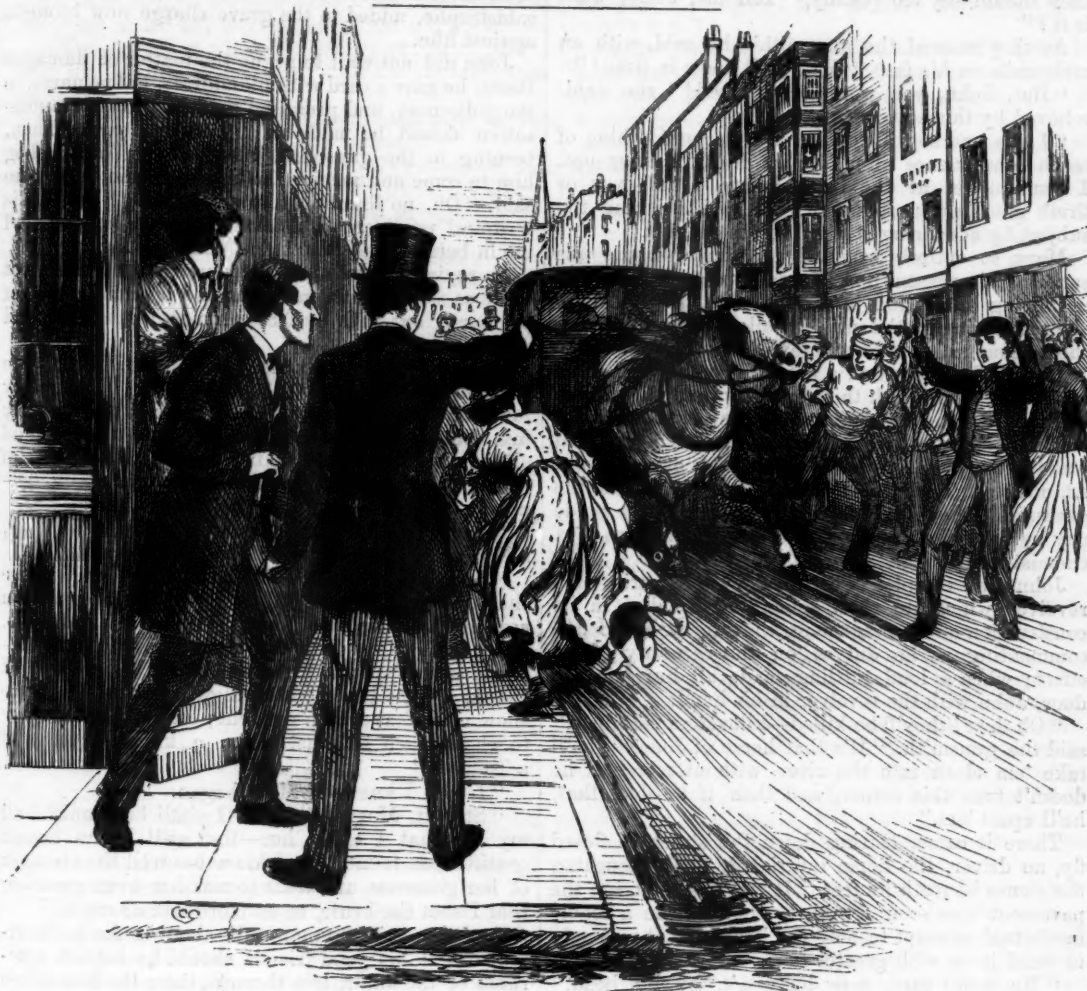
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# THE LEISURE HOUR.

A FAMILY JOURNAL OF INSTRUCTION AND RECREATION.

"BEHOLD IN THESE WHAT LEISURE HOURS DEMAND,—AMUSEMENT AND TRUE KNOWLEDGE HAND IN HAND."—*Cowper.*



A CATASTROPHE.

## THE MAN IN POSSESSION.

CHAPTER XV.—A GOOD MORNING'S WORK.

THERE had always been unlimited confidence between John and Mary Trafford. Some people say there is a peculiar strength of affection between those who are twin-born: certainly their affection for each other was a good illustration of such hypothesis. But for once, perhaps the first time, John had a secret that he wished, for the present at least, to keep; and as they walked briskly on he endeavoured

to divert Mary's mind from the subject he knew to be uppermost in it, by pointing to various things in the shop windows and talking very earnestly and fast about the different things they had best look after first. "I must have a good revolver: there is an excellent gunsmith in this street. Take care of the crossing, Mary, it is very slippery," he said, as he guided her across the street.

Now Mary felt persuaded, from the unusual hurry of his manner, that he was holding back something from her, and she had a strong misgiving that the

something was the very thing she had set her heart upon knowing, so she fell into a debate with herself whether she should force him into a confession, or allow him to wait till he chose to reveal it. A little—one demand—one question, she knew, would be enough to put her in possession of it; but would he hide from her anything it was right and good for her to know?

John understood her abstraction and indifference to his various remarks, and her entire disregard of the shop windows. He understood, too, the unbroken silence she maintained, and the expression of her face, her eyes averted from his as if she were afraid they should say too plainly, "Tell me, John, what is it?"

As they entered the gunsmith's he said, with an arch smile on his face, "You shall know in time!"

"But, John, you were so surprised!" she said, relieved by this advance of confidence.

"I was, and so will you be. But it is not a thing of much consequence after all; at least, I fancy not. I want to get at the truth before I tell you or think much about it myself," he said, finishing the subject by advancing straight to the counter.

Mary so entirely confided in him that she was satisfied his reasons for silence were sufficient, but not being interested in the contents of the shop, she sat musing on the subject while he was examining the various articles the man exhibited for approval.

It was a fine old town: a broad river surrounded the quarter of it in which this street lay, and only a very slight fancy fencing separated its bank from the street end. Another street crossed this one at right angles, and was the thoroughfare to the other parts of the town. At one corner of this intersecting street stood the gunsmith's shop, and the opposite corner was made gay by the bright and many-coloured windows of a chemist and druggist.

John was completely occupied by the merits of a revolver, which, to show something peculiar in its construction and management, the gunsmith loaded—commenting as he did so on the certainty of its effect; when a loud rattling made all hurry to the door, John with the revolver in his hand.

"Oh dear! they'll be killed—killed to a certainty," said the gunsmith. "It's that horse of Jones's; he'll take 'em clean into the river without mercy if he doesn't turn this corner, and then if he does that, he'll upset 'em."

There it came, tearing down the street, a closed fly, no driver, the horse infuriated, hardly touching the stones beneath its feet. It was a long street, the pavement was soon crowded, some made a feeble ineffectual attempt to stop the horse, but it was only to send it on with greater fury.

"He won't turn, sure he won't, by his head," said the gunsmith, in great agitation.

John went out into the street in spite of Mary's scream. Another second or two, and the horse, weltering in its blood, lay prostrate, and the carriage, thrown on its side, was surrounded by the crowd, who thronged forward to help in extricating the passengers. Apparently more dead than alive, they were drawn out—two ladies, one old, one young.

John at a glance saw who they were—Emmet and her aunt Abigail; and holding Mary back, waited until they were carried into the gunsmith's shop, before he told her whom he had saved.

"Let me go to them—oh do let me go to them!" she cried.

"Mary," he said, looking almost rigid for the moment through strong excitement, "she is safe, and that is enough."

Mary understood him and submitted.

"There was no other way of saving them," he remarked, turning to the bystanders. "The poor brute would have been in the river immediately; and, shut up in that thing, who could have helped them?"

The horse was a well-known offender. It had caused many accidents and done serious mischief often; and Jones, the flyman, had been repeatedly warned of his folly in allowing it to remain on the road, but in vain; and an unskilful driver, who had been thrown from his seat a few minutes before the catastrophe, added to the grave charge now brought against him.

John did not wait to argue the matter of damages there; he gave a card with his address, but no name, to the policeman, and promised that all proper compensation should be made to the faulty Jones. Then, turning to the gunsmith, who had run out to beg him to come and receive the thanks of the ladies, he said, "Oh, no thanks, quite unnecessary! but this is a capital revolver. I'll take it, it can never stand me in better stead than it has done this day."

So saying, he took out his purse, with a hand not quite so steady as when he stopped the mad career of the horse, but with perfect calmness of manner, and paid for it.

"Now we will go home," he said to Mary; "we have shopped enough for this morning. I am sorry for that poor brute; but if he had not died by my fire, he would have dashed into the water; and although they say drowning is a pleasant sort of death, I can hardly fancy it in, especially in harness."

"John, surely you will see them!" said Mary, as he hurried her onwards through the street.

"See her? what for?" said John. "No, she shall never have to say that I took advantage of an accidental service to win her heart through gratitude. Why, Mary," he added, growing calmer, and recovering his usual firmness, "don't you see, I should at once become her knight errant if I were to show myself at such a moment; and I have no spurs to show, such as must adorn a knight worthy of a Tafflet!"

"I wish I knew—" Mary began.

"Stop it, Mary—stop it. I shall be thankful all my life that I saved her—that will be an honest gratification to me; but I know too well the strength of her generous affections to risk her even guessing that I shot the brute, so no more talk about it!"

And there was no more talk about it, for he determined that his good friends should be kept in ignorance of the affair, lest through them the fact of his being concerned in it should take wind and come to the ears of Emmet Tafflet.

"You are soon back; made any purchases?" said the old gentleman, who had been taking exercise on his chamber horse, as the day was too lowering to make him think a walk prudent.

John said they had seen nothing to tempt them, "except this revolver," he added, displaying it.

"Not loaded, is it?" inquired the old gentleman, anxiously. "I have a great dislike to firearms and gunpowder; it would have been a serious hindrance to my going into the army."

"Very," said John, smiling. "This, however, is not loaded."

"It smells very strong of powder," said the old gentleman, sitting quite back on the sofa.

Mary had more trouble in keeping their adventure secret from the old lady; but John was positive, and she dared not betray what he had forbidden her to reveal.

"My dear child, how you are splashed! What way did you go?"

Mary remembered nothing but the river that ran at the bottom of the street, and could describe nothing else.

But had she bought nothing? seen nothing?

She had bought nothing—but *seen*! She had seen what she would not forget, though she did not say so.

"You are all of a tremble, Mary; and John looked very white when he came in," said the old lady, with concern.

"Yes," said Mary; "and we are not used to the town, it tries me to walk in the streets."

"Ah, very likely," said the easily-persuaded old lady; "it's all habit. Now, I really think the sharp, fresh air of the country would kill my good man; it's what we are used to, Mary."

It had been a very trying morning for Mary. Her desire to know what had excited John continually rose even through her late agitation, and she asked her friend if they had not better, now that she had changed her dress, go into the parlour.

"As you please, love," said the old lady; "but I wanted you to help me to look over my cedar box. We can sit by the fire, and then I can watch that the girl bastes the mutton. My good man is very particular about basting, it makes the meat so much more wholesome."

What could Mary do? Sincerely did she in her heart consign the cedar box to the back of the kitchen fire, but she was constrained to go and join in the old lady's search for the papers Mr. Keriol had promised to call for, and which she had promised to try and find.

CHAPTER XVI.—DINNER AT ONE.

MISS TAFFILET, who had been somewhat severely bruised, took some time to recover sufficient composure to attend to anything but her present bodily condition; and Emmet, who had escaped unhurt, busily assisted in restoring her to herself.

"I never will ride in a hired vehicle again, Emmet," was her first remark, as she raised herself to sit upright in her chair; "it serves me right, I was very foolish to consent to your persuasions."

Emmet did not attempt to argue that point. "What a mercy we are saved, aunt," she cried. "If it had not been for that brave heart that stood out to stop us at the danger of his own life, we must have been killed."

"Who was it—does anybody know?" asked Miss Taffilet, bathing her bruised face with the lotion that the chemist opposite had supplied.

"A strange gentleman—never saw him before, ma'am," said the gunsmith; "I think he is outside still, talking about the horse, and who's to pay for it."

"Pray look for him—a gentleman, you say?" said Miss Taffilet, taking the bathing handkerchief from her face. "If it's a gentleman, tell him, with my compliments, I hope he will allow me to thank him; if it's—a common man—say he shall be handsomely rewarded."

The gunsmith, repeating that if he was not a gentleman he had never beheld one, went out and returned with John's message.

"And he is gone?" inquired Miss Taffilet.

"Yes, ma'am, he went away directly," said the gunsmith, "and a lady with him."

"Emmet, my love, you are a little hysterical," said Miss Taffilet, noticing that her niece's eyes were full of tears, and that she, who before had seemed full of life and excitement, now sat down listlessly on the seat beside her.

"Take a little sal volatile, love," said Miss Taffilet. "It's very natural. I thought you were too well to last without a collapse. Cry a little, my dear, it will relieve you."

Emmet took the sal volatile, and cried a little, but it did not relieve her. The collapse she was suffering from was that of disappointment after a strongly raised joyous hope.

She had seen the "brave heart," whose name she dared not pronounce. In the unnatural calmness that sometimes comes in an interval of imminent danger, when there is, as it were, a waiting for the blow, she had looked down the street, she had seen their deliverer standing ready for their approach, and could she, at any moment, under any circumstances, be deceived in that face and figure? On being taken from the carriage, her first look was directed towards the crowd, and again she saw him—and surely he saw her—and turned away. Hope—strong hope—fluttered in her heart when her aunt sent to request his visit; and when the refusal came she understood it.

"He pities me, that is it," she thought; "he knows I am a silly girl; he wishes me to understand that the old days were childish, and to be forgotten; he is quite right, it is like him—noble and generous—and I am unworthy of him; and—and—" she began to cry in good earnest at the thought.

"My poor child," said Miss Taffilet, divided now between the business of attending to her own damages and the soothing of her niece, "I do beg you will try and rouse yourself; don't give way, Emmet, it is babyish," she exclaimed, finding that the more tender she was the faster the tears flowed.

"Oh it is—I know it," said Emmet, on whom this rebuke had a good effect. "I won't be a child, I will be strong—I will—I *will* throw it off!" she resolved in desperation, and starting up, she declared that her hysteric was past, and she would not give way to it again.

Mr. Keriol's carriage appearing at the door, put a stop to all conjectures as to how they were to get back. Miss Taffilet having protested against riding again in a hired vehicle, some of the crowd, hearing his name mentioned by her, had carried the news to him, and he had hastened to the spot at once. The horse was being drawn away as they were placed in his carriage.

"That was no ordinary hand," said Mr. Keriol; "what a keen eye and steady hand the man must have!"

"He has, sir; and the best judge of a rifle and revolver you ever saw," said the gunsmith, explaining how it was that he was furnished at the exact moment with the means of their deliverance.

"He is a noble, brave gentleman, and a rare shot; I shouldn't wonder if he's a general officer, he'd got all that sort of way as if he was used to command about him," said the gunsmith.



"I wish we knew who it was," said Mr. Keriol.  
 "We can easily find out from the policeman," said the gunsmith.

"But the gentleman doesn't wish to be found out," said Emmet, determined (with a little bitterness of feeling) not to be behindhand with John in his course of behaviour.

"It is imperative on us, my dear," said Miss Tafflet, "to use our best endeavours to find him; don't you think so, Mr. Keriol? especially if, as this person says, he is a general officer, or in that rank."

"Oh, I think so, whatever he is, for he has undoubtedly saved your lives, and I will inquire of the police, and find out and let you know," said Mr. Keriol.

The shock received by his guests was a sufficient excuse for putting off the dinner party, and John and Mary were relieved from their anxiety as to framing an excuse by a note, declaring that from circumstances which Mr. Keriol would explain in a call, he must decline the pleasure of seeing company for a short time.

"What can have happened since yesterday?" said the old lady.

The old gentleman thought that wholly unimportant; and while his wife and Mary were engaged in the kitchen in again hunting over the contents of the cedar box, and the maid-of-all-work was getting the dinner, he and John were equally busy on the subject which had elicited from the latter the exclamation of surprise the day before.

"Then what is my name?" said John, as soon as they were alone.

"That I don't know," said the old gentleman, "only it is not Trafford; and for you to execute any deed of transfer or any legal document under that name would involve you in endless trouble and loss; it would, indeed. I wonder Mr. Trafford did not warn you of this."

"But I have never known myself, nor been known by any other name," said John.

"It's not your name, Jack, any more than it is mine, and it was foolish of your uncle to call you by it, and I told him so," said the old gentleman. "You know, this is your history:—your mother, who was sister to the first Mrs. Trafford, made an unfortunate marriage, and died of grief, they say; but I dare say she didn't, for grief doesn't kill people, though it spoils their digestion, and makes them thin. Well, you two were born in this very house, and we never would have parted with you only for your aunt. She was bent on having you, and after her death, when we offered to take to you again, Trafford was bent on keeping you, so what could we do?"

"Who and what was our father?" asked John; "I have often asked Mr. Trafford (whom I have always called father, for indeed he has been a father to us); I have hitherto supposed he was a relation of his, never doubting that we bore our right name, but he always seemed unwilling to speak of him."

"Your father? Why, your father, Jack, was a good-for-nothing fellow that went by more names than one, and had no honest calling to be known by, and it was a sad day for poor Mary—your mother—when he became acquainted with her," said the old gentleman.

"Did he leave her—forsake her?" asked John.

"I believe he did—but I think he couldn't help himself exactly; they were very fond of each other, and she would never believe a word against him."

"What name did she call him by?" asked John.

"Jack—always 'dear Jack,' I think. You must know that he was of some high family; your mother, you know, was very respectable, but more in *our* way of life; her father and mine were first cousins, and he was a woolstapler; a good business too he had. But, Jack, fortunes didn't come so fast in those days as in these, so though he was very comfortably off, as we are, he was not of a dashy kind, you understand, and your father, I fancy, was ashamed to own his marriage."

"Contemptible!" said John.

"Ah, so I say; do nothing you can't own to," said the old gentleman.

"And is he—this person—living?" said John.

"No, no, I believe not; he died before your mother, before you were born, they said. He was lost in his voyage to America, where he went to prepare a home—as he said—and to come back and fetch her and her child to settle there; but you know, Jack, when people go by more names than one, and can't give any good account of themselves, one isn't bound to believe everything they say—not *everything*," said the old gentleman, pulling out his watch to see the time, and sidling off the sofa to ring the bell by the chimney corner.

"And were no efforts made to discover who he was?" inquired John, earnestly.

"Efforts? efforts?" echoed the old gentleman, looking at his watch; "why, what is my wife about, and what is that girl about? it wants but five minutes of one and she hasn't begun to lay the cloth!"

The bell, which had not a much louder ring than a sheep bell, received another pull; and the little maid-of-all-work appeared, the cloth over her arm, and a tray in her hands.

"Lose no time, *that* should have been done five minutes ago; it wants but four minutes to one; tell your mistress so when you go out."

While the little maid laid the cloth John was groaning in his heart at the interruption, and the moment she had left them, he exclaimed,—

"My dear friend, this is really a very important matter to me; I must find out my true parentage; I must know my name."

"Here's the dinner!" said the old gentleman as the dishes came in, "everything in its course; after dinner we will have more talk about it. But I don't think you will get any good by finding out, beyond being able to invest that money in your proper name; Trafford would surely have warned you about it, but he knew you were coming to me. Now then, my dear, we are full seven minutes past time; I hope the mutton isn't overdone—take your seats if you please."

The old gentleman was in no hurry about finishing his dinner, however impatient he had been to begin it. John got exceedingly tired of the discussion over the currant jelly, as to whether it was not candied, and as to whether the candying of jelly interfered with its properties so as to render it indigestible; and he was almost provoked with Mary for seeming so much interested in the copious advice the old lady gave her to be sure to mix white currants with red in making jelly, and her serious assurances of the improvement of the said jelly in colour and flavour.

"Some people put a few raspberries in," said the old lady, with a questioning look at her husband.

"Raspberries! raspberries!—spoiling it entirely," said the old gentleman; "entirely altering its character and taste, and very unwholesome. Mary, never put raspberries; you never do, my dear?" he said, holding a piece of mutton topped with jelly on his fork till he knew he was safe in not eating a mixture he disapproved of, and looking with apprehension at his wife.

The old lady speedily reassured him, and discussions of much the same kind, on subjects of similar importance, prolonged the dinner to the very bounds of John's patience.

"Shall I ring the bell, my dear?" said the old lady, who perceived that her guests—even Mary—were getting a little weary.

"No hurry, my dear, no hurry," said the old gentleman; "it's a very bad thing to hurry over eating, especially dinner, *especially* dinner; we have not yet been our usual time," he added, looking at his watch, "we have full nine minutes yet; give John a little more of that —"

"Oh no, thank you, pray don't!" said John, so vehemently, that his host would have been drawn into a discussion on the wholesome and nourishing properties of the said viand if a loud knock at the door had not diverted his attention.

"How I dislike sudden noises!" he said with a start; "and coming immediately after dinner, they are very bad for the stomach—very—I shall have heartburn I dare say."

"Please, sir—the gentleman—Mr. —," said the little maid-of-all-work, who had gone as far as she could in her announcement.

"Mr. Keriol?" asked the old lady.

"Yes, ma'am," said the little maid.

"Tell Mr. Keriol we are at dinner," said the old gentleman, whose hospitable feelings were at zero.

"Please, sir, I did, and he'll wait," said the little maid.

The old lady half rose from her chair.

"Be seated, my dear," said the old gentleman, with some imperiousness. "I told Mr. Keriol our hour; and if he chooses to come before the time, it is his own fault." And again he looked at his watch, while the maid-of-all-work stood with the door in her hand.

"But we were later to-day, you know," said the old lady, in an apologetic tone, and pitying Keriol in the cold passage.

"We were," said the old gentleman, impressively, "and that alters the case; but I hope, my dear, *that* won't occur again to be anybody's excuse," he added, somewhat severely.

The old lady and John and Mary rose from their seats like liberated birds, and the old gentleman, not at all satisfied with the break in on his habits, sat back on the horsehair sofa, looking a less kindly welcome than he would have done under more auspicious circumstances.

"I am afraid I have called at a somewhat inconvenient hour," said Mr. Keriol, looking directly at John, as he entered the room.

"Ahem! I never do, as a rule, Mr. Keriol, receive or pay visits directly after a meal—after dinner, I should say. I think it injurious to the health; but pray be seated. This has been an irregular day. I hope it won't occur again. Health is the greatest of earthly blessings, and indigestion is the destruction of health."

This speech was made with relentless sincerity,

and again Keriol apologised for his intrusion, which the old lady assured him was no intrusion, in spite of little indications from her husband that she was rebelling against truth and his personal interest and wishes in so doing.

"The truth is," said Keriol, "I came to discover the owner of this card," and he showed the card which John had left with the policeman. "I must believe that it is yours," he said, presenting it to John.

"What is it?—what is it?" said the old gentleman, leaning forwards, his curiosity overcoming his discomposure.

"It is a matter of no importance, sir," said John; "I had the pleasure of doing a trifling service."

"Trifling service!" said Keriol. "You saved two lives!"

"Yes. Well, I am happy. I should not have left the address but for the satisfaction of the owner of the vehicle. I don't wish to appear in it."

"But my friends are so grateful, as you may suppose. You will surely allow me to beg your company at my house, where they are staying, that they may thank you in person?" said Keriol.

"I am about to leave England, and time is very scarce with me," said John. "I do not wish for thanks. I should have done it for any one, and am sufficiently gratified in knowing that I was of use."

It was in vain Keriol urged. John was steadfast, to Mary's secret vexation.

Meantime the old gentleman leaned back again on the sofa, divided between attending to his health by not becoming agitated, and trying to discover what it was all about.

John saw what was going on, and, in a few words, told him what had happened.

"You see how little I thought of it, that I did not even inform my worthy friends of it," he said to Mr. Keriol.

"You will at least give me your name," said Keriol, "that we may know to whom we owe this deliverance."

"No, I can't do that," said John, firmly. "I really can't."

Understanding the want of power to arise from want of will, Keriol took his departure, lamenting that he and the ladies were prevented from showing a due sense of their obligation.

"You know I can't tell my name till I know it; can I?" said John to the old gentleman, who was so amused by the story of the rescue that he forgot his indigestion and took to conversation quite readily, while his wife and Mary were again busy over the cedar box; for, in taking leave, Keriol had reminded the old lady of her promise, and signified his intention of calling again shortly—not at dinner-time.

One of the old gentleman's sanitary arrangements was a nap in the afternoon; and John, finding further conversation hopeless till he had had that sedative to his nervous system, and not liking the silence it imposed on the household, strolled out to find some diversion of his thoughts.

He passed along the streets without any definite object, but as the rain was falling fast, and the day had lost all pretensions to brightness, he got tired of his walk, and turned into a bookseller's shop. While he was looking over the new publications that lay on the table, a gentleman of very modish appearance entered, and advancing to the table, took up and laid down several volumes.

"I want something amusing," he said to the shopman, "something good for low spirits."

John looked at him, and felt sure it could not be for himself he wanted it.

"This!" he exclaimed, taking a book from the man's hand; "oh, this won't do, it's for a lady—a lady who is nervous, and wants a little diversion."

One after another he took and returned, with some new objection. "It mustn't be sentimental," he said; "of all things she hates the sentimental, and so do I."

"Here is quite a new work on riddles, sir," said the shopman; "they are not sentimental, and they are very good for diversion."

"Best things going," said the gentleman, who, the reader will guess, was Alan Stapylton.

He took the book and looked as gravely down the first page as if he had been scrutinising a new version of Homer.

John noticed his face, handsome certainly, and with an expression so candid and good-tempered as to atone for much that was wanting in it. Before he could look away, Alan caught his eye fixed on him, and with a frank smile he said, "Are you good at riddles?"

John said they were not much in his way.

"I go in for riddles uncommonly," said Alan. "Now here is a good one—'Why is a horse the most benevolent of animals?' Do you know it? Give it up? 'Because it always stops at the sound of whoa (woe).'"

"But it doesn't *always*," said John.

"No, that's true enough; and my lady friend that I am going to take this to will be up with that at once," said Alan.

John made no remark, but began to think who the lady friend was.

Alan, who liked the look of John, followed up his remark by telling him the story of his own morning's adventure, expatiating quite eloquently on the courage and ability of the hero of his tale, little supposing that he was before him.

"I wanted them to let me go out with them," he said, "but they wouldn't accept of my services. I would never have suffered them to get into that thing with that creature tacked to it."

"I hope the ladies have recovered from their alarm," said John, looking intently on the book open before him.

"Oh, yes, pretty well; but it has made the house a little dull, which is very foolish, now the thing is over. I hope this will help to pass the evening."

So saying, he put the riddle-book into his pocket, and went to the door. The rain came down now in a heavy perpendicular stream; he looked out, unfurled his delicate umbrella, shook his head, shut it up again, and came back into the shop.

"No use to get wet when shelter is at hand," he remarked, looking at John as if to say, "Do talk, there's a good fellow, and don't sit mumping there!"

Finding that reading, even if he were in the key for it, was out of the question with Alan in the shop, and disliking to seem unsociable, though he never felt less desirous of company, John closed his book and made an unimportant remark on the weather.

"Oh yes, wet weather has its good side; if it were always fine there'd be no time for indoor fun, you know," said Alan. "This is a miserably dull place, miserably dull," continued Alan; "if one hadn't the knack of amusing oneself it would be impossible to

live here, but even then it is hard work sometimes, on such an evening as this, for instance. It so happens that we have good company in the house, or I think I should be driven to sigh, a thing I never do if I can help it."

"I thought the town looked lively and well built, containing many excellent houses," said John.

"Ah, yes, but you are a stranger, I conclude, or you would not want to be told that it is dull!"

John admitted that he was a stranger.

Alan plied him with gently advancing questions, hoping to discover his name and calling, that, if eligible, he might invite him to "pass away" the evening as an addition to the riddles.

But John evaded them. All that he divulged was that he was there for a short time only, and would soon sail for the East, on which Alan remarked, shrugging his shoulders,—

"Horribly hot there, but pleasant for some things."

The weather now brightened a little, and Alan again opening his umbrella, gave a friendly farewell and best wishes for a good voyage to John, and left the shop.

"Who is that gentleman?" asked John, when he was out of sight.

"Mr. Stapylton, sir, the ward of Mr. Keriol, that is going to try to recover the estate of Barons Dasset," said the bookseller; "he is the son of Captain Stapylton, of the Dasset family."

"Ah," said John, and re-opened his book; but he did not read, he drew these conclusions:—

"Emmet, then, is staying with this friend of her aunt, in company with this heir of a fine estate, and a scion of a fine family, and he is a good-tempered, good-looking young fellow. Well, only I wish, for her sake, he had more sense. But it is very well I did not commit myself; in every way how glad I may be of this morning's work!"

Looking at his watch he thought the old gentleman must be awake, and he returned, determined to discover more concerning his family history.

"And yet *family*, what care I for family?" he exclaimed, as he walked on. "I will clear out a way for myself; I know the secret of true nobility, and that is better than if I had been born a king's son, or even a Tafflet, and lived and died without it!"

But for all this, though he was quite right, and he knew he was right, and he meant it most sincerely, he was very glad when he got home to find the old gentleman awake, and quite ready to tell him all he knew and all he suspected of his paternal name.

## PROFESSOR GEORGE G. STOKES, F.R.S.

PRESIDENT OF THE BRITISH ASSOCIATION.

GLANCING at the list of presidents since the first meeting of the British Association in 1831, we meet with names of "representative men," sometimes chosen for high social position, sometimes for eminence in various branches of scientific research or applied knowledge. Thus in 1859 the accomplished Prince Consort presided at Aberdeen, succeeding in that post of honour Professor Owen, the highest living authority in comparative anatomy and palaeontology. Sir Charles Lyell, eminent among geologists, presided at Bath, succeeding Sir William Armstrong, the notable inventor, the president of 1863 at Newcastle.



At Dundee social rank had another turn in the person of the Duke of Buccleuch, while at Norwich last year Dr. Hooker, connected by family ties with that city of botanical renown, held the chair, which he now resigns to Professor Stokes, a worthy representative of the highest branches of physical and mathematical science.

According to our usage, we give a brief sketch of the president for the year, such a notice being perhaps more required than in most years, for although in the foremost rank among men of science, Professor Stokes is less known to the large class of "general readers." Born on the 13th August, 1819, at Skreen, county Sligo, Ireland, young Stokes received his education first at the school of the Rev. Dr. Wall, in Dublin, and afterwards at the then existing Bristol College. He entered Pembroke College, Cambridge, in 1837. There he graduated as B.A. in 1841, when he achieved the high distinction of senior wrangler. In the same year he was elected a fellow of his college. The fellowship was vacated in 1857 in consequence of his marriage, but in 1867 Mr. Stokes was re-elected a fellow of Pembroke College, through the exercise of a power conferred on the college by the new statutes.

Qualified for election by graduating in the university, Mr. Stokes became a fellow of the Cambridge Philosophical Society. In the contributions which shortly after his election he began to make to its proceedings, although he had at that time little more than attained his majority, he gave evidence of high powers of mathematical analysis. His first contribution, entitled "On the steady motion of Incompressible Fluids," was read on the 25th April, 1842, and published in the seventh quarto volume of the "Transactions." In May of the following year he read a more elaborate paper "On some cases of Fluid Motion," which was followed up by two other communications on kindred branches of the same subject of fluids.

Referring to these two papers, the late Principal James D. Forbes remarked: "Professor Stokes has introduced for the first time a correct definition for the index of friction of a fluid, and after great labour has succeeded in finding *exact* expressions for the motions of a solid sphere and cylinder. This investigation may be found in a very elaborate paper ('On the effect of the internal friction of fluids on the motion of Pendulums') in the Cambridge Transactions, in which he solves the equations found by him in a previous paper ('On the friction of fluids in motion'), in the cases of pendulums having the forms just mentioned." "Another interesting result of his investigation," adds the same writer, "is the immense effect of fluid friction in retarding the fall of minute raindrops, which he states to be such as to explain satisfactorily the suspension of clouds."

The contributions of Professor Stokes to the Cambridge Society have been continued up to the present time. Those already cited will, however, serve to show the department of physical research to which his studies at that period were given; and the circumstance that in 1849 he was appointed to the Lucasian Chair of Mathematics, is a sufficient testimony to the high character of his mathematical attainments.

The Lucasian Chair of Mathematics at Cambridge was founded in 1663 by Henry Lucas, Esq., M.P. for the university, and is endowed with a small estate in Bedfordshire. The value of the endowment

has been recently augmented by three-eighths of the net annual income of Lady Sadler's foundation for algebra lectureships. The right of appointing to the chair is vested in the Vice-Chancellor and masters of colleges. Professor Stokes gives a series of lectures, theoretical and experimental, on hydrostatics and hydrodynamics, and on optics, with particular reference to the physical theory of light. These lectures are delivered in the Easter term. The Lucasian chair at Cambridge is celebrated on account of the distinguished men of science who have held it from time to time since its foundation. Dr. Isaac Barrow was the first professor, the second was Sir Isaac Newton; Whiston was the successor of Newton. Two distinguished living mathematicians, Mr. Airy, Astronomer-Royal, and Mr. Charles Babbage, have also, the one in immediate succession to the other, occupied the chair. Mr. Stokes succeeded Dr. Joseph King, who had held the office from 1839, for a period of ten years.

On the 5th of June, 1851, Professor Stokes was elected a Fellow of the Royal Society, and on the 27th of May in the following year he announced to that learned body, in a lengthened and elaborate communication, his discovery of the change of refrangibility of light. His researches on this subject originated in a consideration of the very remarkable phenomenon discovered by Sir John Herschel in a solution of quinine, and described by him to the Royal Society in 1845. Though the quinine appears perfectly transparent, and colourless like water, yet when viewed by transmitted light it exhibits, in certain aspects, and under certain incidences of the light, a beautiful celestial blue colour. This had been shown by Sir David Brewster to be a particular case of the general phenomenon of the chromatic dispersion of light within the substance of transparent bodies, whether solid or liquid. Professor Stokes determined that in the phenomenon of internal dispersion, so called, the refrangibility of light is changed—incident light of definite refrangibility giving rise to dispersed light of various refrangibilities; also that the colour of light is in general changed by internal dispersion, the new colour always corresponding to the new refrangibility.

This highly interesting and important paper appears in the "Philosophical Transactions" for 1852, and extends to 100 quarto pages. An abstract will be found in the "Philosophical Magazine" for November of that year. The scientific value of the discovery will be evident when it is remembered that according to the received Newtonian doctrine, the refrangibility of light had hitherto been considered its most inherent and invariable quality. Sir David Brewster, in his "Life of Newton" and "Treatise on Optics," specially discusses the discoveries of Professor Stokes.

So important an event could not fail to be noticed in the annual *résumé* of scientific progress generally made in the address of the President of the British Association. Accordingly we find that Colonel Sabine, president at the meeting held at Belfast in the autumn of 1852, alluded in terms of just appreciation to the successful issue of the researches of the Lucasian Professor. A sentence or two we may extract: "The direct application of the fact (the change of refrangibility of light) as we now understand it to many highly interesting and important purposes is obvious almost on the first announcement. A discovery of this nature cannot be

otherwise than extremely fertile in consequences, whether of direct application, or by giving rise to suggestions branching out more and more widely, and leading to trains of thought and experiment which may confer additional value on the original discovery, by rendering it the first step in a still more extensive generalisation." "I cannot conclude," adds Colonel Sabine, "without adverting to the gratification which all who cultivate science in this part of the United Kingdom must feel at the rising eminence of their highly accomplished fellow-countryman." At an evening meeting while the Association was at Belfast, Professor Stokes explained to his scientific brethren the method and principles of his discovery. He also lectured at the Royal Institution on the 18th February, 1853, on the same subject. The Council of the Royal Society, at the anniversary meeting on the 30th November, 1852, to mark its appreciation of so valuable an outcome of sustained research, by the hands of the President the Earl of Rosse, presented the Rumford medal to Professor Stokes. The remarks of the noble President on that occasion are too appropriate to the purpose of this sketch to be omitted. Earl Rosse thus addressed the discoverer: "It is with sincere pleasure I discharge the duty which has devolved on me of placing in your hands the Rumford medal. Your discoveries in physical optics during the last few years, which have shown in so striking a manner the powers of analysis in bringing the abstruse phenomena of light within the domain of theory, have been crowned by a discovery even more important. That the refrangibility of light should be actually changed by dispersion within certain media, and that the invisible rays of the spectrum should thus be rendered visible, is a discovery as curious, perhaps as important, as any to be found in the recent history of optical science. I am sure I but express the feeling of the meeting that a career commenced so brilliantly may in its course be distinguished by other discoveries of equal value, and that you may contribute to extend the fame of that celebrated university where you received your education, and for which you are now making so signal a return."\*

We should here notice the origin and history of a communication made by Professor Stokes to the Cambridge Philosophical Society on a subject of immediate practical importance—that, viz., of the application of iron to railway structures. A Royal Commission appointed to inquire into this subject, of which Professor Willis, Jacksonian Professor of Cambridge, was one of the members, reported the result of their labours in 1849. The appendix to the report contains an essay by Professor Willis detailing the steps of an investigation made by him into the general nature of the problem of the effects produced by causing weights to travel over

iron bars; in which essay he alludes in the following terms to the co-operation of Professor Stokes: "Having proceeded thus far," says Professor Willis, "I found the discussion involved in so much difficulty that I was compelled to request my friend George G. Stokes, Esq., Fellow of Pembroke College, to undertake the development of it. His kind and ready compliance with my wishes, and his well-known powers of analysis, have produced a most valuable and complete discussion of the equation in question. The mathematical methods employed for this purpose are from their nature probably unintelligible to the majority of practical men for whom the present essay was written; and it was thought better, therefore, that the discussion should be thrown out in the form of a paper and presented to the Cambridge Philosophical Society, before which it was read on the 21st May, 1849. To the 'Transactions' of that society I must beg to refer those of my readers who may desire to follow out this most elaborate and able investigation." The paper referred to will be found in the 8th volume, under the title "Discussion of a differential equation relating to the breaking of railway bridges."

In Dissertation Sixth, prefixed to the eighth edition of the "Encyclopædia Britannica," on the "Progress of Mathematical and Physical Science," we find several references to the labours and discoveries of the Lucasian Professor of Cambridge. "It is almost needless to state," says the writer, the late Principal Forbes, "that Mr. Stokes's mathematical talents are generally acknowledged, and that he has displayed them by a ready application to many difficult problems in optics and mechanics which had not previously been accomplished. I may refer, however, to the integration of complex differential equations occurring in the theory of the flexure of solids, and in that of the rainbow, and in his elaborate investigation of certain cases of the friction of fluids. But it is more to our present purpose to observe that he combines this profound and technical command of analysis with singular skill in the experimental department of optics, not merely in investigations closely connected with the wave theory, and expressible by mathematical formulæ—which he has done in a beautiful paper on the effect of polarisation in modifying the phenomena of diffraction ('Cambridge Transactions,' vol. ix.)—but in those which depend on the judicious questioning of nature by critical experiments not necessarily quantitative,—such, in short, as Newton discusses in his 'Optics;' and, indeed, since Newton himself occupied the Lucasian Chair, there have been perhaps few philosophers who have shown so remarkable an aptitude for both kinds of research."

The experimental researches on the change of refrangibility of light led Professor Stokes indirectly to his discovery of the long spectrum of electric light. When making preparations for his lecture at the Royal Institution on the first-named subject, to which we have already referred, and when receiving the benefit of the assistance of Mr. Faraday, recourse was naturally had to electric light on account of the extraordinary richness which it had been found to possess in rays of high refrangibility. Although fully prepared to expect rays of a much higher refrangibility than were found in the solar spectrum, "I was perfectly astonished," he says, "on subjecting a powerful discharge from a Leyden jar to prismatic analysis with quartz apparatus to find a

\* The Rumford medal originated in a gift of £1,000 stock to the Royal Society by Count Rumford. The donor expressed his wish that money from the proceeds should be laid out from time to time on a prize to be awarded to the author of the most important discovery or useful improvement in Heat or Light; preference to be given to such discoveries as should, in the opinion of the President and Council, tend most to promote the good of mankind. The original sum of stock has more than doubled in consequence of the investment of accruing dividends not applied. The recipient of the prize obtains two medals, one of gold of the value of £60, and the other of silver of the value of £4, besides the available balance of money. The first Rumford medal was awarded to the Count himself for his various discoveries respecting light and heat. Among the many awards afterwards made, the medal was in 1818 conferred on Sir David Brewster, for discoveries relating to the polarisation of light; and on Professor James D. Forbes, in 1838, for experiments on the polarisation of heat. Faraday, in 1846, was its recipient for the discovery of the optical phenomena developed by the action of magnets and electric currents in certain transparent media.



spectrum extending to no less than six or eight times the length of the visible spectrum, and could not help at first suspecting that it was a mistake arising

A paper "On the theory of Oscillatory Waves" was read in March, 1847, before the Cambridge Society, having originated from certain statements made on



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*G. G. Stokes*

from the reflection of stray light." A paper on the long spectrum of electric light was read by him before the Royal Society in June, 1862. In this investigation Professor Stokes was engaged simultaneously with his friend, Dr. Miller. Their researches were, however, conducted in different ways and independently. Dr. Miller's paper, presented at the same time with that of Professor Stokes's, is entitled, "On the photographic transparency of various bodies, and on the photographic effects of metallic and other spectra obtained by means of the electric spark."

In a lecture at the Royal Institution in March, 1859, "On Fluorescence, etc," Faraday had occasion to allude to the "fine contributions to our knowledge of this part of light by Stokes." On the 4th March, 1864, Professor Stokes again lectured to the members of the same institution. The subject of his second lecture was "The discrimination of organic bodies by their optical properties."

that subject at the fourteenth meeting of the British Association. The literature connected with Professor Stokes's investigations, discoveries, and solutions of scientific problems by the application of mathematical formulæ, are to be found in the "Transactions" of various learned societies and other scientific publications. Several articles in the "English Cyclopædia," conducted by Mr. Charles Knight, are, we understand, the productions of his pen. Among the number of valuable papers contributed by Professor Stokes to the "Transactions of the Cambridge Philosophical Society," we may instance the following:—"On the critical values of the sums of periodic series;" "On the formation of the central spot of Newton's Rings beyond the critical angle;" "On the variation of gravity at the surface of the earth;" "On the colours of thick plates;" "On the dynamical theory of diffraction;" and "On the composition and resolution of streams of polarised light from different

sources." In the "Transactions of the Royal Society," just published, and in addition to the papers already referred to as read by Mr. Stokes before that body, there is a contribution entitled "On the communication of vibration from a vibrating body to a surrounding gas." And in the "Transactions of the Royal Society of Edinburgh," also by the same author, appears a paper "On the total intensity of interfering light."

At the meeting of the British Association held at Cambridge in 1862, Professor Stokes gave an elaborate report of the progress made in that branch of physical optics known as Double Refraction; he also on that occasion presided in the section of Mathematics and Physics. Some of his remarks in his opening address to the section as bearing on the utility of the assemblages of scientific men promoted by the British Association may here be opportunely quoted. "Any one," he said, "who has worked in concert with another zealously engaged in the same research, must have felt the benefit arising from the mutual interchange of ideas between two different minds. Suggestions struck out by one call up new trains of thought, and fructify in the mind of another, whereas they might have remained barren and unfruitful in the mind of the original suggester. The benefit of co-operation is by no means confined to the carrying out according to a preconcerted plan of a research involving labour rather than invention; it is felt in the most delightful form in the prosecution of original investigations. In meetings like the present we have the benefit of original suggestions, not of two but of many persons, whose minds are directed to the same object." He also recommended authors of papers—a recommendation not less to be borne in mind at Exeter than at Cambridge—to present the broad leading ideas of their researches, and to place the principal conclusions at which they had arrived clearly and briefly before the section.

At the anniversary meeting of the Royal Society in 1854, Professor Stokes was chosen one of the secretaries, a post to which he has since been annually elected, and which he now holds. Also in 1854 he was appointed Lecturer on Physics at the School of Mines, but in 1859 he resigned that appointment. In 1855 the honorary degree of D.C.L. was, we may add, conferred upon him by the University of Oxford, and in 1865 that of LL.D. by the University of Dublin.

### THE EISTEDDFOD.

At this season of the year the Welsh hold their great national festival, known in their own language as the Eisteddfod, and in ours as the Session of the Bards. Properly speaking, the Eisteddfod is the development of the Gorsedd (literally, a tribunal, or high seat), which the Welsh tell us was in existence more than a thousand years before the Christian era. We need scarcely assure our English readers that the object of the Eisteddfod is not to fan the flame of hatred in the breast of the Celt against the Saxon. Neither is this festival intended as a means of perpetuating the Welsh language, as some have supposed. It may incidentally have this effect, as it also cherishes the old traditions and feeling of the Principality. But the sole professed object is for trials of intellectual strength in literature, and of vocal and

instrumental ability in music. Competitions on these fields constitute the business of the Eisteddfod during the greater part of four days. Prizes ranging from one to ten guineas are awarded for the best essays on given subjects, for the best performance on harp and piano, and for the best singing. Two prizes are competed for with the keenest earnestness, viz., the hundred and fifty guinea prize for an elaborate essay, say volume rather, in English, Welsh, French, or German, and the bardic chair. The latter prize is more honourable than valuable. It is simply a chair of carved oak, decorated with oak leaves and acorns; but to receive "the bardic chair of Gwynedd" is to obtain the highest honour which the Eisteddfod has to offer.

Such, then, in brief, are the objects contemplated by this annual festival, and very creditable they are to the Welsh people. "These contentions," said the Mayor of Ruthin last year, when the session of the bards was held there during a torrid heat that will not soon be forgotten—"these contentions are our Derby and our Oaks. An old cock-pit is yet to be seen in Denbigh, and probably one may be found in Ruthin; but these are the monuments of the tastes of our forefathers. Let English critics say what they will, it is every way better for our people to find amusement in literature, in poetry and song, than in horse-racing, betting, and gambling." In similar strain the Bishop of St. David's has truly said, "It is a remarkable feature in the history of any people, and such as could be said of no other than the Welsh, that they have centred their recreation in literature and musical competitions."

We need scarcely say that during the festival the town in which it is celebrated keeps holiday, and little business is done. Thousands flock to the spot, and beds and lodgings are at a premium. Every house rings with the melody of competitors rehearsing their songs. The church bells ring merry peals, every one who has a flag loyally hoists it, while the streets are bright with festoons of flowers and evergreens and triumphal arches. If the reader will imagine himself in a Welsh town, and amid such surroundings, on the morning that the Eisteddfod is opened, he will have little difficulty in entering into the spirit of the proceedings. About noon a crowd assembles in the market-place, the centre of attraction being a Druidic circle of stones. A clergyman, exactly at noon, offers a prayer in Welsh, and then in English, after which the following proclamation is made:—"The truth against the world. In the year one thousand eight hundred and sixty-nine (let us suppose) the sun approaching the autumnal equinox, at the hour of noon, on the — day of August, after due proclamation, this Gorsedd is opened at —, with invitation to all who may assemble here, where no weapon is unsheathed against them, and judgment will be pronounced upon all works of genius submitted for adjudication, in the face of the Sun—the Eye of light. The truth against the world."

This proclamation having been made, a procession is formed, and the president for the day is escorted to a large pavilion erected in some adjoining meadow. This pavilion, which is gaily decorated with shields, bannerets, flowers, and appropriate mottoes, will hold about four thousand persons. The president for the day makes a brief speech, of course in defence and praise of the Eisteddfod, and then the task of competition commences. The prizes for the successful

essays are distributed, and when an essayist has been fortunate enough to win a silver medal, he is "invested" with it by one of the young ladies present.

All the musical competitions take place in the presence of the assembly, and sometimes they become rather tedious on account of the number of candidates. We have heard one song, for instance, sung by fourteen or fifteen persons, one after another. These competitions occupy about four or five hours, and then there is a brief adjournment. In the evening there is a grand concert, in which professional singers and well-known choirs from different counties in the Principality take part. A competent critic, Mr. Chorley, has highly praised the choral singing at the Eisteddfod.

Mr. Hullah also speaks in high terms of the singing of the chorus who under his leadership last year performed the "Messiah." He says, "The body thus gathered together had to sing together for the first time, under a conductor to whose ways they were quite unused, a long series of for the most part difficult choruses, without a rehearsal. In respect to refinement and finish, a good deal might have been done to improve their performance, with a little preparation; but, in point of accuracy and tune, clearness and spirit, the execution of these strangers to me and to one another could hardly have been better."

As we have said, the festival occupies four days, and one day is very much like another. In the morning there are competitions and the distribution of prizes, in the evening there is a concert. Although there is a good deal of merriment during these four days, there is seldom any excess. At Ruthin last year, not one case of drunkenness or theft was brought under the notice of the police. On the whole, the good people of the Principality deserve high commendation for the mode in which they spend their annual holiday.

### HONITON LACE.

Few travellers on entering the county of Devon by means of the South-Western Railway will fail to notice the beauty of the country as they reach the market town of Honiton. The picturesque hills are covered with foliage to their summits, while the lovely "Vale of Honiton" is well known for its richness and fertility.

"Honiton? Oh, yes! That's where the beautiful point-lace is made." Quite true, my fair traveller, or fair reader, but the manufacture is not confined to Honiton. It is produced in various parts of the county, and especially along the eastern and a part of the southern coast, for about thirty miles, and twelve miles inland.

From the Jurors' Report of the Great Exhibition of 1851 the estimated number of persons employed in this branch of industry was from 7,000 to 8,000. The reporters further observed—"It would be difficult to supply any accurate statistics as regards the number of persons engaged in this manufacture, as the nature of the article enables the parties employed in producing it to carry on the operation apart from each other, and without interfering with a domestic or retired life." So this deservedly beautiful fabric is a kind of household manufacture, made in the cottages of the poor, and not in large factories,

as is the case with articles of a similar kind. In many of the picturesque valleys and coombes of Devonshire the tourist will often stumble upon a prettily embowered living picture,—the young lace-worker, with her pillow on her lap, or else an aged matron seated in her rustic doorway, *hanging with the vine, clematis, or jessamine, rapidly plying her lace-sticks* from side to side to produce the desired "spring" or "border." We see here what recalls Cowper's lines:—

"Yon cottager, who weaves at her own door,  
Pillow and bobbin all her little store;  
Content through morn, and cheerful if not gay,  
Shuffling her threads about the livelong day,  
Just comes a sunny afternoon, and at night  
Lies down secure, her heart and pocket light."

In the early part of the present century the lace manufacturers of Honiton employed about 2,500 women and children in the town and neighbouring villages. But the introduction of the bobbin net machinery, about fifty or sixty years ago, greatly injured the trade, as the whole of the net or "grounding" was previously to this made on the pillow.

McCulloch, in his *Commercial Dictionary*, says:—"At Honiton, in Devonshire, the manufacture had arrived at that perfection, was so tasteful in the design, and so delicate and beautiful in the workmanship, as not to be excelled even by the best specimens of Brussels lace. During the late war, veils of this lace were sold in London at from twenty to a hundred guineas." Recent improvements in this manufacture have again raised the articles to as high a price as the highest quoted above by McCulloch.

Mrs. Bury Palliser, in her beautiful book entitled "A History of Lace," says: "Lace is defined as a plain or ornamental network, wrought of fine threads of gold, silver, flax, or cotton interwoven. Our English word lace is derived by the learned from the Latin word *lacinia*, signifying the hem or fringe of a garment. We ourselves feel inclined to consider it of Anglo-Norman origin. Certain it is that the term '*laces*,' rendered in the English translation of the statutes as '*laces*,' implying braids, such as were used for uniting the different parts of the dress, appears long before the article of which we are now treating came into use.

"In our own country the earlier laces, such as they were, were defined by the word 'passament,' spelt in a variety of ways—a general term for gimps, braids, and laces, whether of gold, silver, silk, cotton, thread, or worsted.

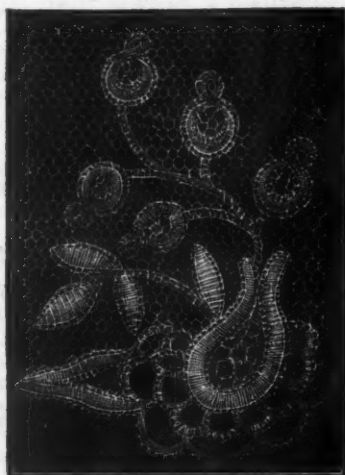
"Many of the earlier laces were made by the threads being passed or interlaced one with another, scarcely more than a white braid; hence they derived the name of passament. Gradually the workmanship was improved, the close passament was enriched with various designs, a finer flax employed; passament, thus improved, in the course of time became lace."

In the sixteenth century the terms *purle*, *passament*, and *bone-lace*, are met with as descriptive of this article of attire; and the latter method of manufacture is said to have been invented by a poor miner's wife in Germany, who was driven to her wits' end in consequence of the failure of her husband's industry.

There are two explanations current of the origin of the term bone-lace. One is that the thread for



working was wound round sheep's trotters before "sticks" were introduced. Another is that fish bones were used instead of pins, an article too costly



ACORN PATTERN. (No. 1.)

for use in the early history of Devonshire lace working. This latter explanation seems a probable one, as a large portion of the trade was located on the sea-coast. Shakspeare alludes to the bone-lace in his play of "Twelfth Night," act 2, scene 5.

"O fellow come, the song we had last night,  
Mark it, Cesario, it is old and plain;  
The spinsters and the knitters in the sun,  
And the free maids that weave their thread with bones,  
Do use to chant it."

And the following mortuary inscription on a "bone-lace siller," is from a table-tomb standing against the exterior south-east wall of the old parish church of Honiton, probably the only record of the kind in the county. The original is in large Roman capitals:—

Here lyeth ye body of James Rodge of Honinton  
In ye County of Devonshire (Bonelace-siller,  
Wath given unto the poore of Honinton parishe  
The benefitt of £100 for ever) who deceased  
Ye 27 July A. D. 1617 ætate Sæe 50—Remember the poore.

The common tradition, and a most probable one, is that lace making was introduced into Devonshire by



BLACKBERRY PATTERN. (No. 2.)

the refugees from Flanders during the sanguinary occupation of the Low Countries by the Duke of Alva in 1567, and the names of some of the old lace makers are evidence of their Flemish origin. The parish records of Honiton also produce charitable bequests of lace manufacturers and dealers of the 17th century, including that of James Rodge already quoted.

Old family portraits and monumental effigies in churches afford us many examples of old lace. Two interesting ones are found in Exeter Cathedral, one the recumbent figure of Bishop Stafford (A.D. 1398), and that of Lady Doddridge (A.D. 1614), wife of Sir John Doddridge, Knight, one of the judges of the Court of Queen's Bench. Also in the parish church of St. Mary Arches, Exeter, the figure of Mrs. Walker, A.D. 1662. The dress of the lady is adorned with a narrow lace of a vandyke pattern. Many of these old monuments give us valuable details of the costume of the period in which they were erected, and in some instances are the only sources of information.

But now we must give some practical account of the manufacture.

Honiton lace is produced by fixing a "pricking" (see No. 7), viz., a perforated pattern of cardboard or parchment, upon a cushion called a "pillow." Pins are then inserted into the perforations of the pattern; next we have a number of little bobbins or spindles, technically "sticks," upon which are wound the fine thread for making the work. These are thrown under and over one another among the pins in various directions so as to twist or interweave the requisite pattern. This is a brief description of the process;



HONITON LACE-WORKER.

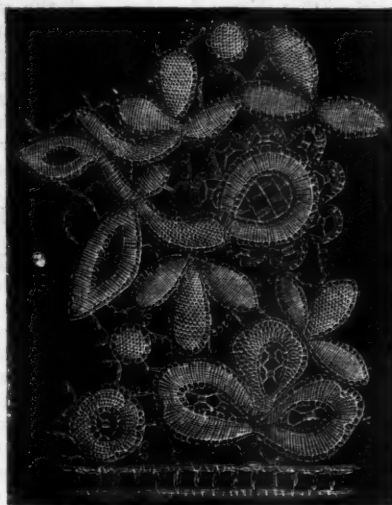
more minute details would only confuse, without making the matter more intelligible. Honiton lace has lately obtained a new celebrity, having been much used by her present Majesty and the various members of the Royal Family, and by leaders of fashion in dress. The great industrial exhibitions of London and Paris, as well as those of our large manufacturing towns, have tended towards effecting important improvements both in the make and design of Honiton lace. A laudable and somewhat successful attempt has been made to introduce designs of natural flowers into lace in lieu of the many grotesque forms which the old lace-makers too pertinaciously adhere to. This idea has been carried out by the Bath and West of England Society, which has encouraged lace exhibitions, and given prizes to

successful workpeople. There always has been a considerable difficulty in providing and maintaining good designs. As will be well understood, the design or pattern in the hands of the lace-workers from frequent use gets gradually dragged out of shape.



TURKEY TAIL PATTERN. (No. 3.)

Did the worker possess a knowledge of drawing or a proper appreciation of "form," this evil would be easily remedied; but this not being the case, the patterns require to be redrawn from time to time by a competent designer, and this can only be accomplished by the large manufacturers, as the expense

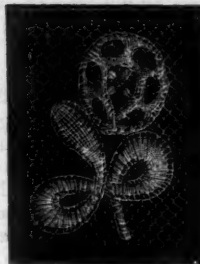


HONITON POINT LACE. (No. 4.)

would be too great to be borne by the private lace-worker.

Another fact connected with this branch of the trade is that no successful designing can be effected unless in conjunction with the actual manufacturer. Very pretty and effective designs can be made on paper, but which would be entirely impracticable. The designer should have a considerable knowledge

of the capabilities of the material; also questions of cost must not be lost sight of in preparing designs, especially bearing in mind the excessive competition



APPLE-BUD PATTERN. (No. 5.)

which exists in every department of our national industry.

Honiton lace as now known is divided into two kinds, "point" and "appliqué." The term *point*, in its original application, when referring to lace, meant that which was made with the needle. Now it is understood as describing that kind of lace of which the separate sprigs or borders are connected together by threads, called "spans" (No. 4). The appliqué is distinguished from the point in that the sprigs or borders are sewn on machine-made net (as in Nos. 1, 2, 5),



ANCHOR PATTERN. (No. 6.)

the sprigs, etc., being made on the pillow (No. 2). The pillow is a circular cushion of canvas stuffed with chopped straw, sometimes externally covered with green baize. In the lace districts pillows are made at the cost of half-a-crown or three shillings each. Lace schools are also in use where children are instructed in lace making; there are also lace dealers, who collect the work from the cottages, who either sell the sprigs or else work them up into articles of attire fit for sale. Boys and men occasionally occupy their leisure hours in lace making. The lace-makers usually keep a little sort of scrap-book of blue paper into which the sprigs are placed to keep them together and to preserve them clean. Many sorts



PRICKING. (No. 7.)

of small sprigs are made in quantities and sold by the dozen, as they are often required to form continuous lengths of lace by being sewn together.

Old Devonshire lace is known as "trolley," that is, lace made in lengths for trimming purposes and with the net-ground worked on the pillow with the pattern. Collectors of old lace will readily detect the old Devonshire by noticing the want of extreme regularity in the net-grounding as compared with the net made by machinery.\*

The old lace-workers are very jealous of any interference with their original patterns. Many of them have been handed down through many generations and still retain a place in the manufacture. It is therefore very difficult to convince them that any alteration or improvement is desirable. The nomenclature attached to them is also odd and curious, often apparently with little or no reference to the object designated. The turkey tail (No. 3) is a well-known border sprig, and bears some resemblance possibly to the spread tail feathers of that bird. There is also lew edge, apple edge, pear edge, three-bow edge, violet edge, and in sprigs violets, roses, blackberries, wheels, fly-wheels, flies, glairs eyes, watches, and spectacles, known in lace vernacular as "spurtacles." Names of celebrity are attached to many of the sprigs, as the Brunswick, Marchioness of Sligo, Marchioness of Douro, as well as those of humbler persons, as the name of some well-skilled workwoman or skilful designer.

During the palmy days of the contraband trade lace was an article which figured largely in it, and all sorts of strange stratagems were resorted to in order to introduce the foreign laces into this country. Being an article of light and easy stowage, it was more readily accomplished than with goods of greater bulk; when landed, it was passed as "English point." Many romantic stories are current of ladies and gentlemen being stopped in the streets and public places by the lynx-eyed custom-house officer, and despoiled of their ruffles and caps, and trimmings, and continental travellers have often added so much to their size, by means of wrappings of lace, as to be scarcely recognised by their most intimate friends. An important portion of the modern lace dealer's business consists in cleaning, mending, and transferring lace. By the latter process, old lace articles can be turned into new and fashionable ones by carefully removing the sprigs or borders, and arranging them in new shapes; any damaged or worn-out portions can be re-made on the pillow, and antique or rare laces can be successfully copied. At the present time ladies are occupying their leisure in copying antique laces, with the needle only, suitable designs, materials, and directions for them having been provided by the lace-makers.

Our subject would be incomplete without reference to the introduction of the bobbin net manufacture. Its history briefly told is as follows: About the year 1770 a stocking-frame worker at Nottingham conceived the idea of adapting his frame to that of weaving lace, it is said, from noticing a piece of pillow lace in his wife's cap. What he suggested and originated was carried into effect by competent machinists, but the successful projector was Mr. Heathcoat, who, in the year 1809, took out a patent for certain improvements, which he retained until the year 1823, when his patent expired. This led to a more extensive use of the bobbin net machine

with great additions and improvements, involving a large amount of capital, the result of which is that the plain net which, under Heathcoat's patent, cost 30s. per yard, is now produced for a few pence.

Lace making, too, is one of the most remarkable instances of the increase of value produced by labour over the first cost of the raw material.

It may not be uninteresting to notice that the common word "tawdry," as expressive of contempt, has its origin in the lace trade, as we gather from "Hone's Every Day Book." "At the annual fair in the Isle of Ely, called St. Audrey's fair, much ordinary but showy lace was usually sold to the country lasses, St. Audrey's lace soon became proverbial, and from that cause tawdry, a corruption of St. Audrey, was established as a common expression to denote not only lace, but any other part of female dress which was much more gaudy in appearance than warranted by its real quality and value."

### THE BRITISH ASSOCIATION AT EXETER.

FROM Bath, in 1864, after making circuit in its annual meetings to Birmingham, Nottingham, Dundee, and Norwich, the "parliament of science" returns this year to the West of England. Again it meets at a "City of Waters," for such is the meaning of the British name of Exeter, Caerwich, or Caerisk. They were not particular as to spelling in those old times, Isk, Usk, Esk, and Exe all standing for water; and the river which runs by Exeter still bears the latter name. It is the same word which appears in the Irish usque-bagh (agua vita), and in the Scotch whisky. The Romans adopted, as was often their custom, the native name, and called Caerisk, Isca; Isca Damno-niorum to distinguish it from another Isca. There is a tradition that Vespasian besieged the city for eight days, when it was relieved by King Arviragus, in the year 49. At whatever time it fell under the dominion of the Romans, it is certain that they made here an important settlement. Coina, earthenware, sepulchral urns, baths, and tessellated pavements have been found in the heart of the present city. An encampment has been also traced on the adjoining Stoke Hill. The name in a variety of Roman forms appears in ancient chronicles, Excestria, Exancester, and in Alfred's time Exanceastre.

Before the time of Alfred, the history of Exeter is rather hazy. Early in the fifth century the Roman troops were withdrawn from Britain, and the "Picts and Scots" are said to have made their unwelcome appearance. Next we meet with our old friends "Hengist and Horsa;" invited to repel the invaders, but mastering their employers, as the man did in the fable, when the Horse invoked his help to drive away the Stag. At Exeter the Britons seem to have shown good fight, for it was not till the close of the seventh century that the city acknowledged the sway of the kings of Wessex, or West Saxondom. In 809, Egbert, the contemporary and friend of Charlemagne, had subdued Cornwall, down to the Land's End, and thenceforward Exeter was undisturbed by inland conflicts.

But a new danger arose from the sea. In 876 the Danes made their first descent on Exeter, and in 894 reappeared before the city and invested it. King Alfred hastened to the relief of the place, and the invaders were for the present got rid of. To his tutor

\* A very fine collection of old laces, both British and foreign, has been presented to the Royal Albert Museum, Exeter, by Mrs. Treadwin, the well-known Honiton lace manufacturer. Mrs. Palliser has also sent her collection for exhibition.



and biographer, Asser, the king gave the revenue of the city, with his royalties in Wessex and Cornwall. Coins of Alfred have been found struck at Exeter. A penny, engraved by Mr. Sainthill in his "Miscellanies," bears the inscription "ÆLFRED REX SAXONUM," and on the reverse "EXA."

Athelstan, who ruled the realm from 825 to 941, was a special benefactor to Exeter. Here he often resided, and he was the founder of the minster or monastery, which was afterwards transformed into a cathedral church by Edward the Confessor. Athelstan built the Castle (afterwards rebuilt on the same site by the Normans), and surrounded the city with a wall and regular fortifications. A coin struck at the Exeter Mint bears the legend "ÆDELSTAN REX. TO. BRIT.," and on the reverse has the name of the master of the Mint, "REGENOLD MO. EXONIE CIV."\*

Passing other Saxon records, we come, in the year 1001, to an assault on the city by Sweyn, King of Denmark. In 1003 it was again taken, and many of the inhabitants put to the sword. Under the Danish successors of Sweyn, Canute, Harold, and Hardicanute, and still more under Edward and his Queen Editha, Exeter grew in wealth and prosperity. William of Malmesbury says it then abounded in all manner of merchandise, "*ubi omne abundat mercemini, ut nihil frustra desideres, quod humano usui conducibile judices.*" With the approval of Pope Leo IX, Edward transferred the united sees of Devon and Cornwall from Crediton to Exeter. Leofric, the prelate, thus promoted, was a favourite of the king, who, with the queen, and an imposing retinue of nobles and clergy, assisted at the inauguration of the new see. Henceforth the ecclesiastical records of the city assume a large importance. Under the care of Leofric, and his successor Osborn, religion made such progress that in 1065 the city could boast of twenty-nine churches.

The West of England refused for some time to acknowledge the Norman supremacy, but Exeter had to submit after a siege of eighteen days by William in person. The Conqueror gained the goodwill of the citizens by giving them honourable terms, and saved the place from being sacked by his troops. Various charters and privileges were conferred by successive kings upon the corporate burgesses. King John allowed the burgesses to elect a chief magistrate with the title of Mayor, as in Winchester, London, and Canterbury. As early as 1265 they were empowered to elect representatives in parliament. In 1285 a parliament was held at Exeter by Edward I.

During the wars of the Houses of Lancaster and York, Exeter had full share of the vicissitudes of the times. Henry VI was received with great pomp in 1452, and eighteen years after Edward IV met with a still more splendid reception. The mayor, with "four hundred citizens in red gowns," attended the king to the cathedral. At a dinner two days after the king thanked the mayor for his great entertainment, and presented to the city his sword. He also established a fair, to commence yearly on the 21st July, and to continue the two following days. Next we hear of Richard III being entertained, and a few years later his conqueror, Henry VII. The impostor Perkin Warbeck tried to enter the city, but was valiantly repulsed by the citizens, and soon after surrendered to the king at Taunton. The king entered Exeter, where he remained from October 7th

to November 3rd, 1497. He, too, presented his sword and his cap of maintenance to the mayor, to be carried before him on state occasions.\*

Under Henry VIII the commercial prosperity of Exeter increased, and the suppression of the numerous religious houses freed the city from many idle members of the community. In the reign of Edward VI an insurrection of Devonshire and Cornwall men caused temporary confusion, but the citizens of Exeter remained loyal, as they did during the succeeding reign of Mary, who rewarded them for their resistance to the Protestant rising, led by two west country knights, Sir Thomas Wyatt and Sir Peter Carew. During this reign Exeter had one martyr, Agnes Best, who was burnt in August, 1557, on Southernhay. On the accession of Elizabeth, the city still retained its character for loyalty, and, with many other more practical privileges, it received from the queen the title of *semper fidelis*, a motto, considering the circumstances, suggestive of Vicar-of-Bray-like humour. The good citizens, in all the variations of politics and religion, had regard to their interest. When Charles I was proclaimed, Exeter lost no time in saluting the rising sun, and sent the new king a gift of £300. In 1642 a similar largess was voted to Henry Grey, Earl of Stamford, the lord-general appointed by the parliament. The city being retaken by Prince Maurice, the king's nephew, showed such loyalty that it was selected as the place where Queen Henrietta was sent for safety, in 1644. Here she gave birth to a princess, who was baptised in the cathedral, and she remained till she left in the autumn for the continent. On a visit by the king, £500 was presented to him by the corporation, and £100 to his son Charles, who was with him. The next year the city had to surrender to General Sir Thomas Fairfax. During the parliamentary ascendancy the cathedral suffered great indignity and damage, doleful descriptions of which remain in the records of these troubled times.

At the Restoration the old loyalty of Exeter reappeared. General Monk was connected with the city: his mother was daughter of Sir George Smyth, who was its mayor in 1607, and who gave his son-in-law the freedom of the city. A portrait of the General now adorns the Guildhall. William III stopped at Exeter on his way from Torbay to London, and this was the last visit of royalty to the city. In Lord Macaulay's History a graphic account is given of the contested election in 1695, when "the freemen of Exeter fared sumptuously every day, and were by no means impatient for the termination of their luxurious carnival. They ate and drank heartily; they turned out every evening with good engels to fight for Mother Church or for King William; but the votes came in slowly." It was not till the eve of the meeting of parliament that the return was made, and Sir Edward Seymour, the candidate opposed to the government, was defeated. The poll was open five weeks.

But now, leaving matters of history, let us briefly note some of the chief things that arrest a stranger's attention in the ancient city. The Cathedral, of course, is first; the distinguishing characteristics of the exterior of which are the two majestic Norman towers which flank the transept, and the imposing

\* It seems doubtful whether the ancient sword still preserved is that of Henry VII. Dr. Oliver says: "We are no longer in a condition to determine as to the originality of either cap or sword." Sir Samuel Meyrick, however, believed in the sword.

\* Noted in the History of Exeter, by the Rev. G. Oliver, D.D.

west front. Several of the city churches are also of great antiquarian interest, such as St. Mary Arches, or De Arcubus, the nave of which dates from the thirteenth century; St. Petrock's, containing churchwardens' accounts from A.D. 1425; St. Martin's-in-the-Close; St. Stephen's, and St. Lawrence, built on the site of more ancient edifices. As in other cathedral towns, the churches of Exeter are numerous, and the clergy form as perceptible an element in the population as in many of the cities of Italy and Spain until recent years.

The venerable Guildhall, in the High Street, is next in importance. The present structure dates from A.D. 1466. The hall contains some valuable portraits, including that of Monk, by Sir Peter Lely; the Princess Henrietta, daughter of Charles I, afterwards Duchess of Orleans; Sir Thomas White, founder of St. John's College, Oxford; John Hoker, chamberlain of the city and member for Exeter in 1571, a learned antiquary; and Sir Benjamin Oliver, mayor, who was knighted by Charles II in 1671, on his passing through the city from Dartmouth to London. At the head and sides of the hall are emblazoned the armorial bearings of many of the mayors, recorders, benefactors, and traders of the city.



ALBERT MUSEUM, EXETER.

The Castle has shared the vicissitudes of the history of Exeter, and has witnessed many conflicts, sieges, and changes of occupation. At the present day the ramparts and grounds form a pleasant resort for the citizens, with the adjoining walks on the Northernhay. The courts of assize and general quarter-sessions were held within the castle precincts from an early period, and hence the presence of the modern Session House. A statue of Earl Fortescue is in

front of this building, and statues of Sir Thomas Dyke Acland, Bart., and of Mr. John Dinham, adorn the neighbouring Northernhay grounds. The Free Cottages, erected by Mr. Dinham, are among the buildings of which the citizens are justly proud.

The Haven and Quay by the river side possess interesting associations. Before the reign of Henry III, the tide brought small vessels up the Exe as far as the Water-gate. This navigation has gradually been lost. A proposal was made in the reign of Henry VIII to restore the water access to the city by a canal. John Trew, of Glamorgan, was the engineer employed, and has the credit of having formed the first canal with locks in England. The story of the successive decays and restorations of this canal is recorded in the annals of the city, down to the time when the existing works were finished by Mr. Green and Mr. Telford. The extension of the railway system has lessened the importance of the canal, but it is interesting as carrying us back to times when a large trade flourished on the banks of the Exe, the quay being crowded with produce from foreign countries, and exports of the broadcloths and other manufactures for which the city was once celebrated. Antwerp was the principal market for the cloth, and afterwards Calais. This trade was destroyed by the unwise laws which checked free trade, and which forbade exportation of English manufactures.

One word in conclusion as to the Royal Albert Museum, of which the citizens may be justly proud. To establish a local and county museum had long been unsuccessfully attempted, till the desire to have a memorial of the accomplished Prince Consort gave fresh impetus to the design. The present handsome and commodious building is the result, combining a museum, library, and schools of science and art. By a visit to this place the stranger will obtain every information, historical, scientific, and popular, about Exeter and the county of Devon.

## MEETINGS OF THE BRITISH ASSOCIATION.

The following is a return of the places of meeting, the names of the Presidents, and the amounts of grants since the commencement of the British Association:—

		Grants (omitting pence).
1831	York .. .. .	Earl Fitzwilliam. .. .. .
1832	Oxford .. .. .	Dr. Buckland. .. .. .
1833	Cambridge .. .. .	Professor Sedgwick .. .. .
1834	Edinburgh .. .. .	Sir Thomas M. Erisbane .. .. .
1835	Dublin .. .. .	Dr. Lloyd .. .. .
1836	Bristol .. .. .	Lord Lansdowne .. .. .
1837	Liverpool .. .. .	Lord Burlington .. .. .
1838	Newcastle .. .. .	Duke of Northumberland .. .. .
1839	Birmingham .. .. .	Rev. W. Vernon Harcourt .. .. .
1840	Glasgow .. .. .	Marquis of Breadalbane .. .. .
1841	Plymouth .. .. .	Dr. Whewell .. .. .
1842	Manchester .. .. .	Lord Ellesmere .. .. .
1843	Cork .. .. .	Lord Rosse .. .. .
1844	York .. .. .	Dean Peacock .. .. .
1845	Cambridge .. .. .	Sir John Herschel .. .. .
1846	Southampton .. .. .	Sir Roderick Murchison .. .. .
1847	Oxford .. .. .	Sir R. Harry Inglis .. .. .
1848	Swansea .. .. .	Marquis of Northampton .. .. .
1849	Birmingham .. .. .	Dr. Robinson, of Armagh .. .. .
1850	Edinburgh .. .. .	Sir David Brewster .. .. .
1851	Ipawich .. .. .	Mr. Airy .. .. .
1852	Belfast .. .. .	General Sabine .. .. .
1853	Hull .. .. .	Mr. Hopkins .. .. .
1854	Liverpool .. .. .	Lord Harrowby .. .. .
1855	Glasgow .. .. .	Duke of Argyll .. .. .
1856	Cheltenham .. .. .	Dr. Daubeny .. .. .
1857	Dublin .. .. .	Dr. Lloyd .. .. .
1858	Leeds .. .. .	Professor Owen .. .. .
1859	Aberdeen .. .. .	The Prince Consort .. .. .
1860	Oxford .. .. .	Lord Wrottesley .. .. .
1861	Manchester .. .. .	Mr. W. Fairbairn .. .. .
1862	Cambridge .. .. .	Professor Willis .. .. .
1863	Newcastle .. .. .	Sir William Armstrong .. .. .
1864	Bath .. .. .	Sir Charles Lyell .. .. .
1865	Birmingham .. .. .	Professor Phillips .. .. .
1866	Nottingham .. .. .	Mr. Grove, Q.C. .. .. .
1867	Dundee .. .. .	Duke of Buccleuch .. .. .
1868	Norwich .. .. .	Dr. Joseph Hooker .. .. .